

## **Strategy: Dragon Run Special Area Management Plan**

### **A. Summary of the Coastal Management Problem**

The Dragon Watershed's primary management conflicts exist between preserving traditional timbering, farming, hunting and trapping uses, protecting habitat and wildlife and managing public access. A complicating factor to managing the watershed is that it extends through several jurisdictions, which all have a number of local, state and federal entities that play a role in governing the resources. Local government involved with the watershed includes Gloucester, Middlesex, King and Queen, and Essex Counties, while the Middle Peninsula Planning District Commission (MPPDC) plays a regional role in managing the area. State and Federal interest in the watershed includes: Chesapeake Bay National Estuarine Research Reserve in Virginia, the Virginia Coastal Program, Department of Environmental Quality, and the Army Corps of Engineers.

Historically, the MPPDC has been a regional leader in facilitating planning processes across jurisdictional lines and promoting planning activities that benefit the region. Dealing with watershed management issues related to the Dragon is not a new regional concept. The areas of concern identified below were re-affirmed in October 2000 by the Dragon Run Steering Committee (an MPPDC advisory committee), comprised of concerned citizens from the watershed and elected and appointed local officials. The Coastal Program has for many years funded staff support for this Committee through MPPDC Technical Assistance grant. The Committee has been working on these issues since the late 80's. The Committee has produced a Dragon Run Access Plan (revised 1994), and a Dragon Run Watershed Management Plan (1996). Additionally, in 1998, Gloucester County completed a Natural Heritage-Conservation Easement project, which was funded through the Coastal Program. Although many of the concerns identified below have been addressed in these studies, these results need to be built upon to strengthen and support regional and local planning initiatives and state and federal interests in the watershed. Over a decade of time, energy, local, private, state, and federal support has been directed in a piece meal fashion to address management concerns.

Much of the Middle Peninsula serves as a bedroom community for out-commuting residents. Suburban sprawl from urban employment centers is now creeping into the region. As such, the demand for land for development is increasing. Inherently a land disturbing activity, development leads to land use conflicts and exacerbates water quality problems without adequate management tools and protection efforts. Localities, such as Gloucester, are experiencing population growth rates above the state and national rates. According to the US Bureau of Census, Gloucester experienced a 15.4% growth rate between 1990 and 2000, as compared to 14.4% for the state and 13.2% for the nation. Furthermore, the rate of population change for all localities bordering the watershed indicates population expansion. The extent of population change ranges from 5.4% to 15.4% indicates net gains in population. The Mid Bay Raceway (originally 100 acres renamed Virginia Motor Speedway) has been recently purchased and expanded to over 700 acres. The expansion includes new grandstands, parking expansion, and a possible campground, all within the drainage of the Dragon. A regional landfill, built in the mid 90's, is also located within the drainage area of the Dragon. Furthermore, a major

historical institutional landholder has sold all land holdings within the watershed, consequently disrupting leased hunting grounds and increasing the possibility of land subdivision. Management of the Dragon must involve coordination and cooperation among each locality. The proposed Dragon SAMP will seek to minimize the adverse impact of approaching suburbanization on the natural resources of the Dragon by improving the range of tools available to Gloucester, Middlesex, King and Queen, and Essex County to control new development and protect the traditional uses of the waterbody.

At the October 2000 Dragon Run Steering Committee meeting, members discussed current land use controls, existing conservation tools, forestry practices, soil types, flood zone issues, topography, water quality concerns, habitat and other factors necessary to reaffirm the commitment of delivering tools back to local government necessary to address the following concerns:

1. Development Management - How can the Dragon system be preserved and protected from residential, commercial and industrial development or embrace sustainable eco-friendly development at the local and regional level?
2. Educational Management - Traditional uses of watershed resources and future users of the watershed require continuous active and passive educational programs to understand the dynamics and relationships required to preserve the system.
3. Silvicultural and Agricultural Management - How can traditional silvicultural and agricultural activities be sustained, managed and protected from a higher intensity use land use at the local and regional level?
4. Wildlife Management - How can animal and plants be managed and protected from negative impacts at the local and regional level?
5. Public Use and Public Access Management - How can public use and access be managed and balanced against the unique environmental characteristics of the system at the local and regional level?

## **B. Identification of Program Change**

1. Development of a Special Area Management Plan that will, among other things, provide an assessment of the current physical state of the Dragon Run watershed and its existing management, as well as outline new frameworks to address development, silviculture, wildlife, and public use-public access management issues.

## **C. Anticipated Effect of the SAMP**

The primary objective of the Dragon Watershed SAMP is to coordinate planning efforts across jurisdictional lines to create one management structure to minimize threats in the watershed. The SAMP process presents a much-needed opportunity to standardize environmental controls across jurisdictional lines that will supplement, enhance and support local government planning. Several of the proposed program changes will address the cumulative and secondary impacts of development and protection of wetlands as well as the preservation of historic uses through the modification and/or the development of new ordinances, the modification of existing ordinances and the creation of innovative management programs. In addition, the Dragon SAMP will address public

access and use issues through the development of Memoranda of Understanding between state, local, regional and private user groups.

#### **D. How the SAMP Will Address Dragon Run Priority Needs**

Work products from the Dragon Run Steering Committee completed in 1994 and '96 developed five topic areas of concern that will be pursued in the SAMP: development management, educational management, silvicultural and agricultural management, wildlife management, public use-public access management. These topic areas represent current concerns, future projects, and future planning initiatives. As the management plan is developed, local and regional recommendations for management and protection of the watershed will be proposed and developed. The Steering Committee stands ready to support the necessary policy and management changes needed to preserve, protect, and manage the resources of the watershed. The Committee also recognizes that without changes to local government planning tools, substantial residential and industrial development may proceed unimpeded, while at the same time diminishing or significantly restricting the traditional uses of the watershed. Furthermore, the Committee is ready to return to each locality acting as the Memorandum of Understanding lead partner to seek the support and endorsement necessary to change policy and also, to seek voluntary support for non-binding private protection measures above and beyond local policy.

#### **E. General Work Plan**

1. Comprehensive Watershed Inventory (Reprogrammed FY 98 funds) The staff from the MPPDC, Chesapeake Bay National Estuarine Research Reserve, and the Virginia Coastal Program will collectively assess the physical state of the watershed. The inventory will consist of two parts: analysis and GIS data collection. The following analyses will take place: land use, build out, economic, comprehensive plan, zoning and subdivision review, and incorporation of these results into the MPPDC-GIS system. The GIS data will be collected for environmental, cultural and planning related attributes, and these will be incorporated into the MPPDC-GIS system. These activities will serve as the foundation for the SAMP as well as for educating the public and appointed and elected officials about the Dragon Run Watershed. They will also assist with implementing the SAMP at the local level.
2. Develop and sign partnership Dragon Watershed MOU
3. Develop Watershed Management Plan
4. Education and Public Outreach

	(FY98 funds)	FY 01	FY 02	FY 03	FY 04
Task 1	Conduct GIS Watershed Inventory- Physical state of the watershed				

Task 2	Perform physical and management analysis- Land use and buildout analysis, zoning and subdivision review ordinance review economic analysis and comprehensive plan review				
Task 3		Form Advisory Committee-Project Management Team. Develop Memorandum of Understanding between partners Between			
Task 4		Compile Draft Management Plan, to include elements addressing GIS findings, development, agriculture, silviculture, wildlife, and public use-public access management	On-going	Ongoing	Ongoing
Task 5		Education (on going, government and public) Establish Technical Assistance Program/build resource library, and website material	On-going	On-going	On-going
Task 6		Dragon SAMP Digital Textual Library	On-going		
Task 7		Voluntary BMP Prplanning	On-going		

### **Task 1. Conduct GIS Watershed Inventory**

A critical first step toward watershed based management involves collecting and organizing disparate pieces of information for the entire watershed. An extremely useful tool to manage and analyze data for the watershed over the long term is a Geographic Information System (GIS). The Middle Peninsula Planning District Commission

(MPPDC) will develop such a GIS watershed tool and conduct critical analyses described below. The GIS will eventually be used by a watershed manager to assist with the development of a management plan management to preserve the traditional uses of the watershed, including hunting, fishing, farming, and forestry.

### **Task 2. Perform physical and management analysis**

One of the primary uses of the Dragon Run GIS Watershed inventory GIS will be to serve as the base for conducting analysis. A development buildout analysis and economic analysis will be conducted to assist with the development of the management plan. Local planning tools will be reviewed and incorporated into the analysis process.

### **Task 3. Form Advisory Committee**

The formation of an Advisory Committee - Project Management Committee is essential to project success. The committee will be comprised of Dragon Run Steering Committee members, landholders, community leaders, decision makers, Virginia Coastal Program representative, Chesapeake Bay National Estuarine Research Reserve in Virginia representative, NOAA and other concerned citizens and groups. These members will develop and sign a Memorandum of Understanding outlining the commitment to the Dragon SAMP.

### **Task 4. Compile Management Plan**

The management plan will include elements addressing development, agriculture, silviculture, wildlife, and public use-public access management. The plan will be used as a tool to assist with modifying, strengthening, or changing local policy in an effort to preserve the historic uses of the Dragon.

### **Task 5. Educational Management –Government and Public**

Staff will be required to administer an educational program designed to inform decision-makers, community leaders and concerned citizens as to the progress of the SAMP process and findings. Staff will use both active and passive learning approaches to advocate and promote the relationship between land use, water quality, public access, and the possible array of zoning and other tools available to protect the resources of the Dragon.

### **Task 6. Dragon SAMP Digital and Textual Library**

Staff will build and support a digital and textual Dragon SAMP resource library. Staff will collect and organize paper and digital information related to the Dragon to serve as a data warehouse for supporting future program change. Digital information will be accesable via existing [www.mppdc.com/projects/dragon.htm](http://www.mppdc.com/projects/dragon.htm) Material will be organized by topic area.

### **Task 7. Develop Dragon Run BMP Land Trust Program**

Hire a consultant to develop Dragon specific voluntary best management practices program: target timbering, agricultural, and residential land owners.

**F. Summary of Estimated Costs**

**Delay Start of 01 by 3 months ** 9 months in 01, 6 in 02	FY 98 re-programmed funds	FY 01 15 Months	FY 02 6 Months	FY 03 6 Months
Salaries	1,000	43,750	17,500	17,500
Fringe benefit (32%)	320	14,000	5,600	5,600
Indirect costs (58%)	680	33,499	13,398	13,398
Travel		1,250	250	250
Equipment		1,250	0	0
Supplies		5,251	252	252
Consultant	48,000	6,000	0	0
TOTAL	50,000	105,000	37,000	37,000

**Budget detail:**

Travel: local and a national meeting

Equipment: GPS, field computer, software

Supplies: meeting and marketing materials

Consultant: FY 01 BMPs (Residential BMP Consultant work will be done in the first 6 months of FY 02);

**G. Likelihood of Attaining the Proposed Program Changes**

The proposed activities are based on planning and local/regional aspirations that have existed for more than a decade. The timelines outlined for finalizing planning and initiating program change are all achievable if the additional staff resources and limited operating funding requested in the project become available. There is significant support for this project at both the grass roots and the local government levels. The prospects for accomplishing the desired changes are very good.

**H. Fiscal and Technical Needs**

Projected surpluses in the Virginia economy have not been realized. Funding and staffing levels of natural resource agencies in Virginia are currently fixed, with no new funding likely and reductions in agency budgets required. This limits the agencies' abilities to undertake new or expanded program activities without outside funding. SAMP funding is critical to project success.

Additionally, due to the complex planning relationships, consultants will be utilized when the need arises for such expertise. It is anticipated that consultants will be needed for the GIS watershed analysis, land use and economic analysis using reprogrammed FY 98 funds.

